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ABSTRACT

The assessment movement within higher education will not meet its broadest objectives unless it pays more attention to educational processes through process management. Process management holds that quality suffers when those who produce the goods or services are not directly accountable to the stakeholders in the production enterprise. Within higher education the producers are faculty and administrators and the consumers are students. Though colleges and universities must do a better job of managing educational processes, the barriers to process management are formidable as the current privileged class of faculty and administrators has little or no accountability to the needs of the host society. Key elements of academic process management are comprehensive posttest examinations, alumni impact studies, exit interviews, area examinations, and employer impact studies. Other measures should include value added student end-of-course surveys, value added faculty end-of-course surveys, comment analysis of open-ended comments from students and faculty on surveys, reviews of teaching behavior, quick access to the president or a quality committee, surveys and interviews of stakeholders on an occasional basis, and establishment of a quality committee. Students and other stakeholders must be viewed as critical consumers, not passive recipients of educational services. Two figures are included. (JB)

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Achieving Academic Quality Through Process Management

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Paper presented to the American Evaluation Association

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Annual Meeting -- November 1, 1991, Chicago, IL.

Achieving Academic Quality Through Process Management[1]

A Chinese tale has it that a physician of great renown was asked which among his brothers, all of them physicians, was the most talented at his trade.

He replied, "My eldest brother sees the spirit of sickness and removes it before it takes shape, so his name does not get out of the house.

"My elder brother cures sickness when it is still extremely minute, so his name does not get out of the neighborhood.

"As for me, I puncture veins, prescribe potions, and massage skin, so from time to time my name gets out and is heard among the lords."

Program evaluators are sometimes presented with situations in which they have little choice but to measure outcomes against program objectives. Yet, I know of no capable program evaluator who would willingly set aside a resplendent group of highly accessible process measures to conduct research on a set of outcomes measures which are less accessible, more costly to attain, and which will often arrive far too late to have direct effects on the sources of data--students and faculty.

If higher education focuses its attention on outcomes its likely to repeat the failures of many U.S. businesses in an earlier period when product quality was controlled by measuring how much merchandise went out the front door, minus how much defective merchandise was returned at the back door. Notwithstanding the many negative effects on employee morale and competence, this simplistic scheme works reasonably well only when competitive forces are modest or nonexistent, and when the needs of the market are stable and predictable. None of these conditions apply to today's higher education environment.

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[1] Portions reprinted with permission from: Tucker, Robert W., (1991). *What to do while waiting for outcomes assessment: A case for academic process management.* **Adult Assessment Forum, 1(2).**

If nothing else, the assessment movement is supported as a plausible remedy for the long-standing downward spiral in the efficiency and effectiveness of U.S. higher education. One thinks twice, therefore, before criticizing such a movement. Yet, contemporary standards of program management, program evaluation, and quality management all suggest that the assessment movement will not meet its broadest objectives unless it pays more attention to educational processes.

Education's Failures in Managing Quality

Society has given higher education extremely poor marks for its part in the erosion of public confidence in the meaning of a college education. No longer can we be assured that college graduates are numerate and literate. Many graduates of the Class of 1992 will be well educated--although as a group, not nearly so well as their counterparts in Europe and Asia. However, other new U.S. graduates will not possess even the skills demanded for graduation from a rigorous high school preparatory program. Higher education's failure is one of quality control. There is too much variation in the process. God may well, as Einstein suggested, reside in the details, and it is exactly this attention to the management of detail which distinguishes leaders in the service industries. For a variety of reasons, many of which are wrongly subsumed under the rubric of academic freedom, higher education has been negligent in providing institutional level attention to the details of the educational process.

Process management holds that quality suffers when those who produce the goods or services are not directly accountable to the stakeholders in the production enterprise. In the case of higher education, the primary producers are faculty and

administrators. Stakeholders include primary consumers (students), secondary consumers (business and industry), those who fund education (students, families, citizens, foundations), and others whose work indirectly supports education (program evaluators, legislators). Well-executed process management brings the total organization in close touch with the actual delivery of services. Ask yourself. How many university employees, at any level, have the slightest idea what goes on in any classroom? If you can think of one or two, ask how many people receive this information on a day-to-day basis, and what is done with it. On the other hand, well run service organizations outside the field of education gather and act upon massive amounts of process information on a daily basis. Virtually everyone in the organization knows, or has access to know, the details of each day's service delivery. Even the language of process management--ownership, boundaries, control points, measurements, and corrective actions--implies responsiveness and accountability for the total system. In the face of this emphasis on step-by-step assessment, outcomes measurement in the private sector is taking on a confirmatory rather than diagnostic relationship to product quality. From this perspective, assessing what goes "out the door" is the last--and in some senses, the least important--step in a series of activities to ensure that all stakeholders needs are met.

Achieving Quality Through Better Process Management

Colleges and universities must do a better job of managing educational processes. They must consistently assess whether classes meet as scheduled, and for the time scheduled; whether the faculty member supplies appropriate levels of classroom

management; to what extent the class, as taught, addresses the core learning objectives of the discipline; to what extent the students are satisfied with the overall delivery of the service; to what extent the teaching of individual courses is comparable across classes, faculty, and periods of time. If the class is made up of working adults, ongoing assessments also should be conducted to determine whether students' professional experiences are being integrated with the educational environment; to what extent faculty members optimize the learning process through the use of group, cooperative, and other horizontal learning exchanges; and how well satisfied are these adult consumers that their career objectives are being met.

The barriers to process management in higher education are formidable. Through the creation of a privileged class of faculty and administrators, largely unaccountable even to themselves, the community of higher education has become a meandering behemoth, indiscriminantly accomplishing great and little feats with very little responsiveness or accountability to the needs of its host society. It is not unknown for faculty to hold themselves above the very canons of rational inquiry which underscore their teaching, and the logic of process and outcomes assessment.

Key Elements in Academic Process Management

Much to the credit of those who legitimized the science of program evaluation over the past quarter century, and to those more recent evaluators who elevated the assessment movement to a national agenda, a variety of measures are now gaining acceptance in the assessment of educational quality. Ideas such as comprehensive posttest examinations, alumni impact studies, exit interviews, area examinations, and

employer impact studies are now widely accepted in educational rhetoric. Such measurement strategies share two properties. Each has merit as part of a comprehensive plan measuring institutional effectiveness, but each is analogous to testing a newly manufactured video camera as it is being boxed for shipment. One may learn whether the machine is working, but if it is not, a thousand prior opportunities to have prevented the problem were forever lost.

All of the measures necessary to an academic process management system have been explored to some degree in various educational environments. Faculties of colleges of business daily exhort students to realize the value of process management systems in environments other than their own classroom. The problem lies in the fact that few colleges or universities have applied a sufficient number of process measures to give a fair picture of the educational environment, and fewer still have actually connected any such system of measures with policy and procedures to improve the environment. At the very least, these measures should be adapted to the adult-centered educational delivery system.

Value Added Student End-of-Course Survey. Many colleges administer a student end-of-course survey. Very few do so in a way that would earn a passing grade in a graduate research practicum. Ask critical probing questions concerning curriculum, faculty, and institutional support services; require participation from all students; administer the survey apart from the normal classroom environment; provide timely results of findings at appropriate levels of detail to all educational stakeholders; aggregate findings across faculty, courses, programs, schools, years, etc.; require evidence

of interpretation and utilization of results at all levels. Above all, link findings to institutional decisions. Doing so will bring to bear appropriate forces to ensure that the interests of all stakeholders are represented in the process. None of this should be confused with the typical student end-of-course survey as they are currently managed on most campuses.

Value Added Faculty End-of-Course Survey. Follow the same general pattern as student surveys; focus on faculty assessment of students' ability to benefit from the course, curriculum, and administrative support.

Comment Analysis. If properly collected and analyzed, open-ended comments from students and faculty (typically written on the back of an end-of-course survey) possess several advantages over the more typical data from scaled questions. The short list of advantages is that they carry more salience, significance, and fidelity to the respondent's intentions. The downside to comment analysis is that some levels of analysis require the aggregation of a large number of comments over time and situations (computers are a must for any school with more than 5,000 students), and it takes some technical know-how to establish a knowledge-base or expert system to process them. The University of Phoenix Department of Institutional Research has developed a computerized knowledge-base comment analysis system that processes, analyzes and permanently stores over 125,000 student comments each year. This system produces a family of over 20 monthly reports. Included in this report system is a detailed end-of-course comment profile for each faculty member, a report analyzing elements of curriculum on a course-by-course basis, a highly aggregated administrative report on

university services, and a cumulative comment profile for faculty, area chairs, and program specialists. In less than two years of operation, the comment analysis system has established itself as the earliest and most reliable source of information for operations and strategic planning.

Claims that comment analysis will produce a biased or negative view are theoretically unfounded--I know of no argument to support such claims. Moreover, the 200,000 or so comments in the existing University of Phoenix data base would seem to go a long way toward refuting any such claim on the basis of actual results. In this system, the majority of students' comments pertain to curriculum and faculty, and of them, the vast majority are positive. Only comments about environmental services (classrooms, parking) are predominantly negative. Negative comments tend to be quite specific and focus on issues which can be targeted for action.

Reviews of Teaching Behavior. Most educational institutions and many academic societies issue awards for teaching excellence. Rather than depending on an appropriate evaluative process, many teaching awards are based on excellence in research, distinguished administrative acts, or on having the good fortune to be able to count outstanding citizens among your former students. There are many sounder ways to evaluate the teaching process, and it appears that there is a resurgence of interest in the topic. Recently, Michael Scriven has classified 13 extant models of teacher evaluation and, with others, is working on improving the quality of evaluation methods. While it is probably not a good idea to do teacher evaluation badly, there are enough good methods around to remove virtually all justifications for not doing it.

Pipeline to the President. At thirty day intervals, provide all students, faculty, administration, and staff with a postage paid complaint and kudos form that goes directly to the president or to a quality committee; develop a system to track and act on all comments. Again, contrary to commonly expressed fears, most comments are in the form of compliments. The University of Phoenix "Comment to the Chair" system serves 700 staff, 1600 faculty, and 13,000 students. It is managed by one half-time staff position.

Survey and Interview Stakeholders on an Occasional Basis. For no reason other than to learn, one can easily assemble a task force of interested stakeholders to visit other stakeholders such as boards, advisory committees, students, faculty, employers, parents, etc.

Establish a Quality Committee. No one has a corner on the quality market. Assemble representatives of all sectors of the institution (grounds keepers included) as a quality committee. Give the committee a direct line to the decision makers. Hold the committee accountable for products and processes. Publish the proceedings prominently throughout the institution. Rotate membership often enough to keep ideas flowing. The literature on quality committees in now flourishing, suffering only from not being able to keep pace with the rapid developments in the field. A well chosen consultant will have a knowledge base greater than can be acquired from the literature.

Will process management work for higher education? It appears to work very well for those few institutions practicing it. The University of Phoenix, for example, maintains five institution-wide databases for outcomes assessment and 14 databases

averaging over 200,000 records per year for process management. While outcomes assessment holds promise for the future, process management is producing usable information right now.

In general, however, higher education has ignored or criticized process management, clinging instead to an elitist perspective. Customer service in the classroom must become important. The student and other stakeholders must be viewed as critical consumers, not passive recipients of educational services. Does your college or university practice educational process management? Can you add to the above list of process measures? Have any of your innovations in process management resulted in improvements in educational quality or efficiency? I welcome your comments on any of these issues.[2]

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UOP EDUCATIONAL SYSTEM
FORMATIVE AND SUMMATIVE ASSESSMENT

Measures Of Educational Inputs

University Management Systems

- Academic Reviews
- Departmental Reviews
- Financial Reviews
- Faculty Assessments
- Student Pretests
- Student Records
- Faculty Records
- Competitive Analyses
- Buildings/Classrooms
- Internal Customer Service Survey
- Survey Of Organizational Culture

Measures Of Educational Processes

Academic Quality Management System (AQMS)

- Registration Survey
- Evaluations Of Grading Practices
- Reviews Of Faculty Teaching
- Student End-Of-Course Surveys:
  - Objective Questions
  - Comments Analysis
- Faculty End-Of-Course Surveys:
  - Objective Questions
  - Comment Analysis
- The Student Representative System
- Comments To The Chairman
- Graduation Survey

Measures Of Educational Outputs

Adult Learning Outcomes Assessment (ALOA)

- Comprehensive Cognitive Assessment
  - Pretests
  - Posttests
- Affective Impact Assessment
  - Pretests
  - Posttests
- Alumni Impact Survey/ Interview
- Faculty Impact Survey
- Employer Impact Survey/ Inverview
- Capstone Research Project Assessment
- Qualitative Case Studies

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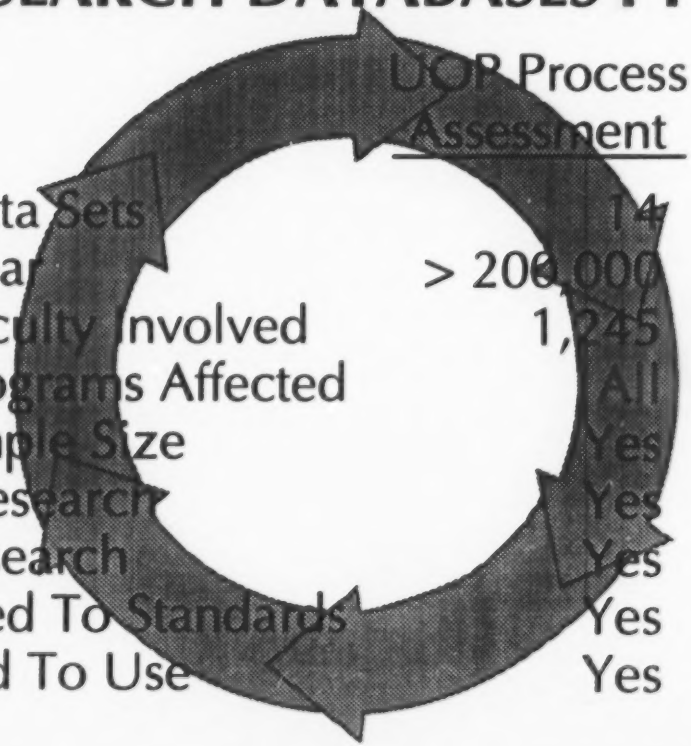
HIGHLIGHTS OF UOP ASSESSMENT STRATEGY
RESEARCH DATABASES FY – 92*



	UOP Process Assessment	UOP Outcomes Assessment
Number Of Data Sets	14	5
Records Per Year	> 200,000	> 20,000
Number Of Faculty Involved	1,245	1,245
Number Of Programs Affected	All	All
Significant Sample Size	Yes	Yes
Quantitative Research	Yes	Yes
Qualitative Research	Yes	Yes
Measures Linked To Standards	Yes	Yes
Findings Linked To Use	Yes	Yes

*Source: Robert W. Tucker, University Of Phoenix Assessment Update

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